

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-49 (canceled)

Claim 50. (original) A method of preventing or treating an inflammatory condition, the method comprising administering to a mammal in need thereof a prophylactically or therapeutically effective amount of an active enamel substance.

Claim 51. (original) A method according to claim 50, wherein the active enamel substance is selected from the group consisting of enamelines, amelogenins, non-amelogenins, proline-rich non-amelogenins, amelins (ameloblastin, sheathlin), tuftelins, and derivatives thereof and mixtures thereof.

Claim 52. (original) A method according to claim 50, wherein the active enamel substance has a molecular weight of at the most about 120 kDa such as, e.g., at the most 100 kDa, 90 kDa, 80 kDa, 70 kDa or 60 kDa as determined by SDS Page electrophoresis.

Claim 53. (original) A method according to claim 50, wherein the amount of active enamel substance applied on the wound is an amount of total protein per  $\text{cm}^2$  of affected tissue surface corresponding to from about  $0.01\text{mg}/\text{cm}^2$  to about  $20\text{ mg}/\text{cm}^2$ , such as from about  $0.1\text{ mg}/\text{cm}^2$  to about  $15\text{ mg}/\text{cm}^2$ .

Claim 54. (new) A method of preventing or treating an infection, the method comprising administering to a mammal in need thereof a prophylactically or therapeutically effective amount of an active enamel substance.

Claim 55. (new) The method according to claim 54, wherein the active enamel substance is selected from the group consisting of enamelines, amelogenins, non-amelogenins, proline-rich non-amelogenins, amelins, tuftelins, derivatives thereof, and mixtures thereof.

Claim 56. (new) The method according to claim 55, wherein said amelin is ameloblastin or sheathlin.

Claim 57. (new) The method according to claim 54, wherein the active enamel substance has a molecular weight of at most about 60 kDa to at most about 120 kDa, as determined by SDS Page electrophoresis.

Claim 58. (new) The method according to claim 54, wherein the infection is a bacterial infection of the skin or of a mucosal surface.

Claim 59. (new) The method according to claim 54, wherein the bacterial infection is an infection of the oral cavity.

Claim 60. (new) The method according to claim 54, comprising administering the active enamel substance to skin, to a mucosa, to a non-oral tissue, to a surgical incision, or to an internal wound.

Claim 61. (new) The method according to claim 60, wherein the mucosa is selected from oral, buccal, nasal, aural, rectal and vaginal mucosa.

Claim 62. (new) The method according to 54, wherein the active enamel substance is provided on or in a bandage, dressing, drench, patch, sheet, plaster, pad, soap, stick, sponge, transdermal delivery system, or denture.

Claim 63. (new) The method according to claim 54, wherein the active enamel substance is provided in a capsule, tablet, pill, pellet, inhalation device, delivery device, spray, aerosol, shampoo, or enema.

Claim 64. (new) The method according to claim 54, wherein the active enamel substance is provided as an implant or a coating of an implant.

Claim 65. (new) The method according to claim 54, wherein the active enamel substance comprises a peptide comprising at least one sequence element selected from the group consisting of Asp-Gly-Glu-Ala, Val-Thr-Lys-Gly, Glu-Lys-Gly-Glu, and Asp-Lys-Gly-Glu.

Claim 66. (new) The method according to claim 65, wherein the active enamel substance further comprises an amino acid sequence comprising a consecutive string of 20 amino acids at least 80% identical with a string of amino acids of the same length obtained from a polypeptide comprising SEQ ID NO. 1, amino acids 1 to 103 of SEQ ID NO. 1, or amino acids 6-324 of SEQ ID NO. 2.